

# LIFE ON THE MURRAY RIVER

**Level:** 5 & 6

**Activity:** 2

## Overview

The Murray River is an amazing resource that has helped sustain life for tens of thousands of years. It is now up to us to make sure that the Murray River stays healthy and flowing for many years to come. Erosion of river banks is one issue that can greatly affect the health of the river. During this activity, students will model erosion using materials from the natural environment. They will investigate common causes and possible ways to combat erosion.

## Resources

- Computer access for students
- Shallow plastic containers (one for each group of 3-4 students)
- Collection of natural materials, such as rocks, twigs, dirt, sand etc (students could collect these themselves during the lesson)
- Jug or watering can for each group
- Camera or other device for filming

## Activity

### ENGAGE

Ask students to close their eyes and imagine the Murray River. Ask:

- What plants/animals might we find beneath the water?
- What else might be hiding beneath the water?

Now ask them to picture the river bank, imagining that they have x-ray vision. Ask:

- What plants/animals might be hiding beneath the earth?
- What is the riverbank made of? (e.g. Loose rocks, tight-packed earth, clay etc.)

### EXPLORE

Take students outside to an appropriate area and organise them into small groups of 3-4 students. Give the groups an opportunity to collect materials from the natural environment to use when constructing a model river bed (e.g. soil, rocks, twigs, leaves etc). Groups can now build their river bed inside a shallow, transparent, plastic container. Using a watering can or jug, students can slowly pour water along their riverbed. They should document what happens by taking photos or time lapse video.

### EXPLAIN

Explain to students that this geological process is called erosion. As a whole class discuss:

- What did you notice?
- How long might this process take in real life?
- How did the composition of your riverbed affect the way it eroded?
- How did the movement of the water affect the way it eroded?
- Are there other factors that might affect this process?
- How can we stay safe around river banks that may have been affected by erosion? What do we need to consider before entering the water in these areas? (Answers may include: Reading safety signs, staying away from crumbling edges, using recommended access points, checking the water for submerged obstacles, etc.)

### ELABORATE

Give small groups time to investigate erosion further. They will then need to combine their photos/video, together with their research, to create a visual presentation specifically about erosion along the Murray River. They will need to consider the following:

- What are the common causes of riverbank erosion?
- How does erosion affect the health of the river?
- How is erosion being addressed along the Murray River?

### EVALUATE

Invite each group to present their findings. Discuss as a whole group:

- What is something that you have learnt?
- Why is it important to maintain the health of our waterways?
- How could we help?

## Curriculum Links



Level 5		
GEOGRAPHY	<u>Geographical Knowledge:</u> Factors that shapes places and influence interconnections	Environmental and human influences on the location and characteristics of places and the management of spaces within them ( <a href="#">VCGGK096</a> )
Level 6		
GEOGRAPHY	<u>Geographical Knowledge:</u> Factors that shapes places and influence interconnections	Environmental and human influences on the location and characteristics of places and the management of spaces within them ( <a href="#">VCGGK096</a> )

### Sample Report Comments

{Name} used natural materials to model the geological process of erosion. {He/She} can describe this process in simple terms of cause and effect.

{Name} has investigated the issue of erosion along the Murray River. {He/She} can describe some of the natural and man-made causes, as well as strategies that are being used to combat this issue.